

Human EP<sub>4</sub> Receptor Variant VAR-1

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ATGtccactc cgggggtcaa ttcgtccgcc tccttgagcc ccgaccggct gaacagccca 61
gtgaccatcc cggcggtgat gttcatcttc ggggtggtgg gcaacctggt ggccatcgtg 121
gtgctgtgca agtcgcgcaa ggagcagaag gagacgacct tctacacgct ggtatgtggg 181
ctggctgtca ccgacctgtt gggcactttg ttggtgagcc cggtgaccat cgccacgtac 241
atgaagggcc aatggcccgg gggccagccg ctgtgcgagt acagcacctt cattctgctc 301
ttcttcagcc tgtccggcct cagcatcatc tgcgccatga gtgtcgagcg ctacctggcc 361
atcaaccatg cctatttcta cagccactac gtggacaagc gattggcggg cctcacgctc 421
tttgagctct atgcgtccaa cgtgctcttt tgcgcgctgc ccaacatggg tctcggtagc 481
tcgcggtcgc agtaccaga cacctggtgc ttcatcgact ggaccacca cgtgacggcg 541
cacgccgcct actcctacat gtacgcgggc ttcagctcct tcctcattct cgccaccgtc 601
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gtgtcttact ggtggatgag gctggtggga gcggcagggc tgggcctgcc cctaagggga 1501
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FIGURE 1

Human EP<sub>4</sub> Receptor Variant VAR-2

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ATGtccactc cgggggtcaa ttcgtccgcc tccttgagcc cggaccgggt gaacagccca 61
gtgaccatcc cggcgggtgat gttcatcttc ggggtgggtgg gcaacctggg ggccatcgtg 121
gtgctgtgca agtcgcgcaa ggagcagaag gagacgacct tctacacgct ggtatgtggg 181
ctggctgtca ccgacctgtt gggcactttg ttgggtgagcc cggtgaccat cgccacgtac 241
atgaagggcc aatggcccgg gggccagccg ctgtgcgagt acagcacctt cattctgctc 301
ttcttcagcc tgtccggcct cagcatcatc tgcgccatga gtgtcgagcg ctacctggcc 361
atcaaccatg cctatttcta cagccactac gtggacaagc gattggcggg cctcacgctc 421
tttgcagtct agtaccacaga cctgctcttt tgcgcgctgc ccaacatggg tctcggtagc 481
tcgcggctgc agtaccacaga cactggtgc ttcacgcgact ggaccaccaa cgtgacggcg 541
cacgccgcct actcctacat gtacgcgggc ttcagctcct tcctcattct cgccaccgtc 601
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gaacttatca gaaaaatgta tataaa

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FIGURE 2

Human EP<sub>4</sub> Receptor Variant VAR-3

ATGtccactc cgggggtcaa ttcgtccgcc tccttgagcc ccgaccggct gaacagccca 61  
 gtgaccatcc cggcggtgat gttcatcttc ggggtgggtg gcaacctggt ggccatcggt 121  
 gtgctgtgca agtcgcgcaa ggagcagaag gagacgacct tctacacgct ggtatgtggg 181  
 ctggctgtca ccgacctgtt gggcactttg ttggtgagcc cggtgaccat cgccacgtac 241  
 atgaagggcc aatggcccgg gggccagccg ctgtgcgagt acagcacctt cattctgctc 301  
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 tcgcggtgc agtaccaga cacctggtgc ttcctcgact ggaccaccaa cgtgacggcg 541  
 cagcccgct actcctacat gtacgcgggc ttcagctcct tcctcattct cgccaccgtc 601  
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 cgccgcacgc cgggcgcca gatccagatg gtcactttac tcattgccac ctccctggtg 841  
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gtaacctgaa gactattgag taacataaaa tttcccaagc tgcaaatgaa gaatttatat 1141  
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 actgaactta tcagaaaaat gtatataa

FIGURE 3

MSTPGVNSSA	SLSPDRLNSP	VTIPAVMFIF	GVVGNLVAIV	VLCKSRKEQK	ETTFYTLVCG	LAVTDLLGTL	EP4 WT
MSTPGVNSSA	SLSPDRLNSP	VTIPAVMFIF	GVVGNLVAIV	VLCKSRKEQK	ETTFYTLVCG	LAVTDLLGTL	VAR-1
MSTPGVNSSA	SLSPDRLNSP	VTIPAVMFIF	GVVGNLVAIV	VLCKSRKEQK	ETTFYTLVCG	LAVTDLLGTL	VAR-2
MSTPGVNSSA	SLSPDRLNSP	VTIPAVMFIF	GVVGNLVAIV	VLCKSRKEQK	ETTFYTLVCG	LAVTDLLGTL	VAR-3
LVSPVTIATY	MKGQWPGGQP	LCEYSTFILL	FFSLSGLSII	CAMSVERYLA	INHAYFYSHY	VDKRLAGLTL	
LVSPVTIATY	MKGQWPGGQP	LCEYSTFILL	FFSLSGLSII	CAMSVERYLA	INHAYFYSHY	VDKRLAGLTL	
LVSPVTIATY	MKGQWPGGQP	LCEYSTFILL	FFSLSGLSII	CAMSVERYLA	INHAYFYSHY	VDKRLAGLTL	
LVSPVTIATY	MKGQWPGGQP	LCEYSTFILL	FFSLSGLSII	CAMSVERYLA	INHAYFYSHY	VDKRLAGLTL	
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FAVYASNVLF	CALPNMGLGS	SRLQYPDTWC	FIDWTTNVTA	HAAYSIMYAG	FSSFLILATV	LCNVLVCGAL	
FAVYASNVLF	CALPNMGLGS	SRLQYPDTWC	FIDWTTNVTA	HAAYSIMYAG	FSSFLILATV	LCNVLVCGAL	
FAVYASNVLF	CALPNMGLGS	SRLQYPDTWC	FIDWTTNVTA	HAAYSIMYAG	FSSFLILATV	LCNVLVCGAL	
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LRMHRQFMRR	TSLGTEQHHA	AAAASVASRG	HPAASPALPR	LSDFRRRRSF	RRIAGAEIQM	VILLIATSLV	
LRMHRQFMRR	TSLGTEQHHA	AAAASVASRG	HPAASPALPR	LSDFRRRRSF	RRIAGAEIQM	VILLIATSLV	
VLICSIPLVV	RVFVNQLYQP	SLEREVSKNP	DLQAIRIASV	NPILDPWIYI	LLRKTVLASKA	IEKIKCLFCH	
VLICSIPLVA	NWKWSHKTTD	GMSDECEAHL	YIQEKCHKFG	CEYSSTSYIS	QVWSEKSVKI	QICRPSELLL	
VLICSIPLVF	PKLQMKNLXH	SATYRVAIGA	SIRQPVISAK	FGARSQ----	-----	-----	
VLICSIPLVA	NWKWSHKTTD	GMSDECEAHL	YIQEKCHKFG	YDYDRI----	-----	-----	
IGGSRRERSG	QHCSDSQRTS	SAMSGHSRSF	ISRELKEISS	TSQTLLPDLS	LPDLSENGLG	GRNLLPGVPG	
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-----	-----	-----	-----	-----	-----	-----	
MGLAQEDTTS	LRTLRISETS	DSSQGQDSES	VLLVDEAGGS	GRAGPAPKGS	SLQVTFPSET	LNLSEKCI	
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FIGURE 4

# Genomic Structure of Human EP<sub>4</sub> Receptor and EP<sub>4</sub> Variants

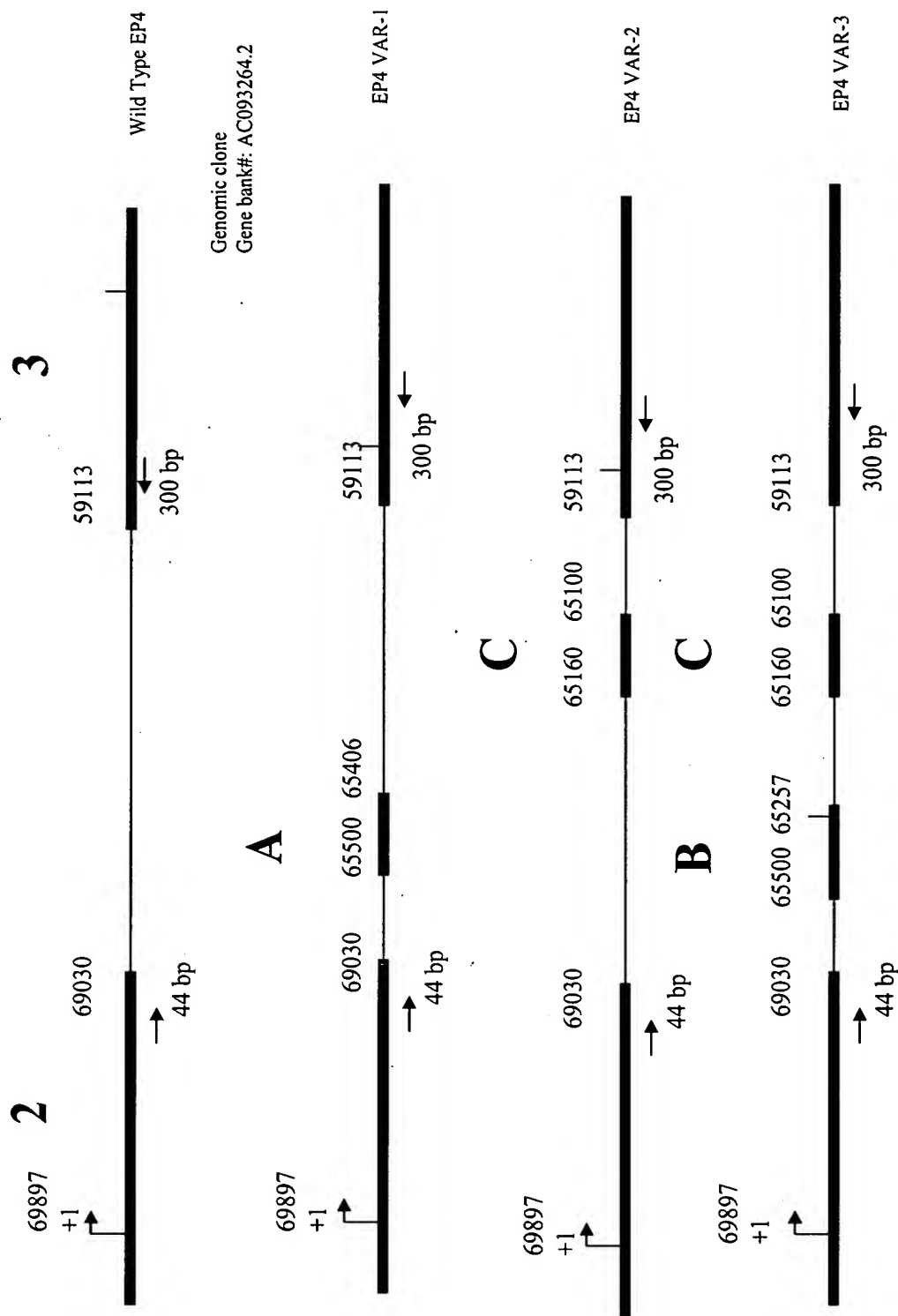


Figure 5

Multiple Tissue Distribution of Alternative Splicing Variants of EP<sub>4</sub> Receptor

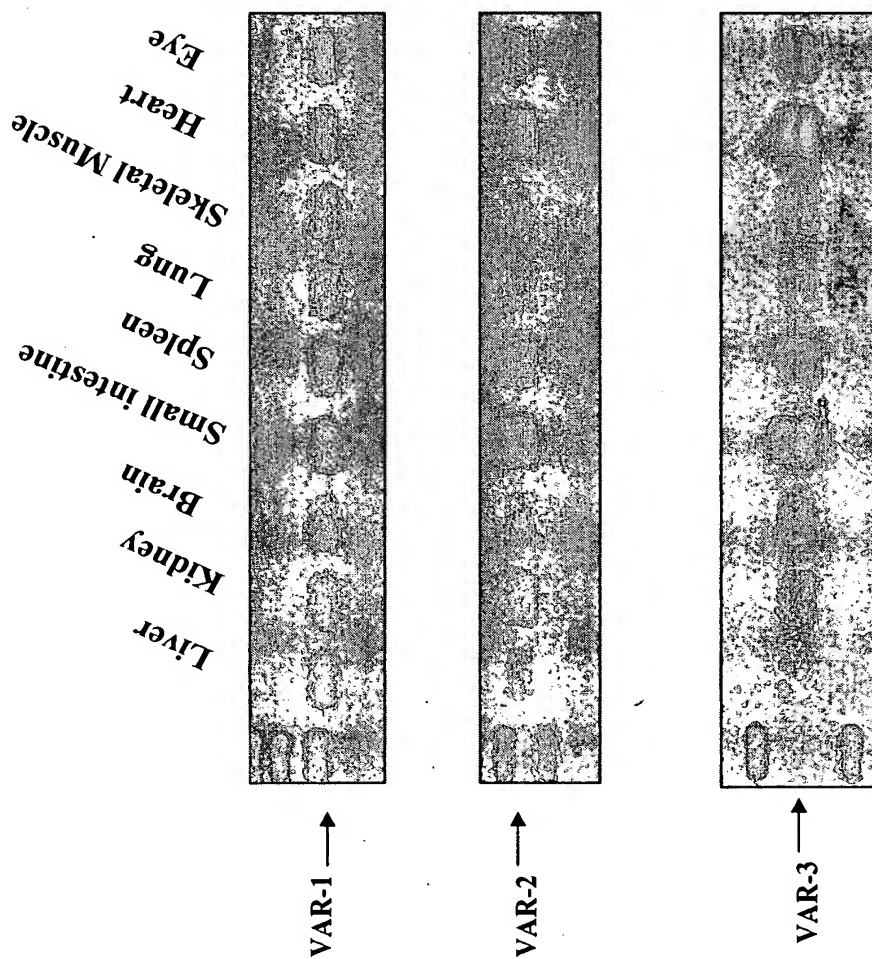


FIGURE 6